A Queer Little Fellow, The Bag Worm

Whose Home May Be Found in the Fall.

BY ELLEN ROBERTSON-MILLER.

(a.) Young Caterpillars, Enlarged (b.) Bag-Worm Houses and Larva. (c.) Male Moth.

IT was one of those hazy, lazy, delightful days of late October, and so warm that I took the little mother in her wheel-chair through the park. Many of the leaves had fallen, and as we moved they gave forth that same musical rustle that is so dear to the heart of childhood, and which is remembered long after childhood's days have been left behind.

The little woman loved the autumn and the beautiful tinted leaves; and as we went along she grew to be a bit of moving woodland herself, for I filled her arms with such branches as appeared to us, just a little more brilliant than their neighbors, until she could carry no more; then we rested under the wild cherry tree by the waterfall and she made a picture never to be forgotten.

Today, when I started to tell you about the queer little fellow, the bag-worm, I seemed to want to tell you first about the picture, for it was the central figure in it, the little mother, who discovered the bag-worm houses upon the cherry tree.

One of the charming features about out-of-door study is the fund of recollections that are stowed away with the specimens gathered, and these are likely to remain, as in this case, long after the specimens have disappeared.

The little woman never wore glasses, but she has remarkably keen eyes, that saw many things that her daughter would have otherwise missed. That day in October it was the bag-worm houses she discovered; silken pouches they were, an inch in length, with irregular bits of twigs and leaves attached to their outer surfaces. There were a half-dozen of them dangling from a limb, and these at once resolved themselves into an interrogation mark, for I had never before seen nor heard of them. I judged the bags were empty, but carried them home because of their unusual and novel appearance. I then opened the side of one and, to my surprise, found a small black chrysalis within. This led me to believe that the insect architect uses its dwelling as a cocoon, from which it emerges as a winged adult.

I had intended to look up the subject in hand, but for some reason did not, and was dumbfounded in June when I discovered a lot of wee crawlers in the box where the bag-houses had been placed.

My first thought was that an ichneumon fly had deposited her eggs in the black chrysalides, and I was about to toss the entire lot into the fire, when the little woman asked to see them. I handed her the box and a reading glass, and as I stood waiting her face showed such surprise that I said:

"Well, what is it?"

"What is it? Just see if you can tell what they are doing," was her reply.

For a moment I could not. Then it dawned upon me. Each small caterpillar was trying to cover itself with bits from the paste-board box, fastening them together with the finest of silk threads.

"They must belong to the family who made the bags on the wild cherry tree," I said, "but where do they come from?" Caterpillars never hatch from chrysalides." I examined once more the bag I had opened in the fall; its pupa was still there, but hard and lifeless; some disease had destroyed the insect. I opened two other specimens. They were empty, and yet no moths were in the box and they could not have escaped from it. It quickly cut down the sides of the three remaining bags. Two contained a lot of small, empty egg shells, while the third held eggs from which the larvae had not hatched, and the shriveled skin of what had been the mother moth. When I went to the professor for information on this subject, he told me that the female of the bag-worm is a grub-like creature, having neither wings nor legs; in fact, that she is a mere sack of eggs, and that her entire life, as a growing caterpillar, a chrysalis and a moth, is passed within her bag home, which she begins to build as soon as she is born, and which she enlarges as she increases in size; that the male moth has a dark body and clear wings, and somewhat resembles a bee in both looks and behavior, but that his life history is identical with that of the female, until the time when he emerges from his chrysalis. Then he pushes through the bottom of his bag and flies away to find one which conceals his mate. When he has located it he pays her a visit, but after this loses interest in things, so to speak, and ere long has disappeared from the face of the earth.

When the little woman discovered the six bag-worm houses, the male inmates from two had already emerged. By an unfortunate chance, I had found a diseased chrysalis in a third and was thus misled. Had I opened any one of the other specimens instead, I should have discovered the fertile female moths depositing the eggs from which the caterpillars came, who caused so much consternation in the following June.

They proved a source of great interest and amusement to the little mother and myself. We fed them on cedar, pine, oak and wild cherry, so of course the bags were not all alike, and those of the females proved to be the larger.

A caterpillar would walk about on its thoracic feet and eat with its bedecked domicile held above or swinging from below its back, resembling, as it did so, an animated basket of dried leaves.

They appeared to be sociable little fellows, and sometimes traveled in pairs, but by the first of September all friendliness ceased. A great change was coming, and each had to prepare for and meet this change alone.

When the leaf baskets no longer moved and the fresh food remained untouched, the little woman suggested that a crippled child in our neighborhood would enjoy watching the life history of the bag-worm insect, so we passed nearly the entire family over to him, and he is now anxiously awaiting the arrival of June, when he hopes to make the personal acquaintance of the odd little basket weavers.

A Comfortable Family Dinner

BY CORNELIA C. BEDFORD.

FOR everyday dining the housekeeper naturally tries to provide her family with meals which are substantial, nutritious and which can be served in a way pleasing alike to eye and palate without an undue expenditure of time. Here is a meal which fulfills such requirements and has the added merit of not costing a great deal.

Black Bean Soup
Braised Beef Heart Sausage Stuffing
Potato Snow Corn Pudding
Apple and Celery Salad Cheese Wafers
Chocolate Custards
Coffee

We have reached the time of year when continuous fires are not only desirable, but imperative, for months to come. This makes it possible, without extra expenditure of fuel, to prepare a long series of dishes requiring continuous cooking for a number of hours. To this list belong stews, soups with stocks, and various preparations of legumes and tougher cuts of meats which would be unpalatable if quickly prepared. For this meal we find two such dishes—the soup and meat. All dried legumes need not only long cooking, but a preparatory soaking, to yield the best results, and among beans none are richer in flavor than the black or turtle bean when properly treated. For this meal, which is planned to serve six persons, take one pint of black beans and pick them over the day before the soup is to be used. Wash to remove dust, then cover with several quarts of cold water and let soak over night. In the morning drain and place them in a deep kettle or saucepan. Cover with three quarts of fresh cold water, add a scant teaspoonful of salt and heat slowly. Simmer gently for four hours; then in a pan slowly fry together one quarter of a cupful of chopped carrot, one chopped onion and one slice of white turnip cut fine. When browned, add these to the soup, with two sprigs of parsley, half of a small bay leaf, three cloves and a half-teaspoonful of peppercorns. Continue the slow simmering until the beans are very soft; then rub through a sieve, pressing hard to get as much pulp as possible. Return to the kettle; if too thin, boil down slightly until as thick as rich cream; then add salt and pepper if necessary. When finished there will be between three and four pints. At this stage the soup may be set away or aside until near the dinner hour; then reheat and when boiling stir in one tablespoonful of flour rubber to a smooth paste with a little cold water. Have ready for each person a quarter of a hard boiled egg and a thin slice of lemon; these may be placed in the tureen or in soup places, according to the method of serving. As the soup is taken from the fire add one or two tablespoonfuls of sherry, and it is ready for immediate service.

A beef heart is composed of what is technically known as non-striated fibre, the result being a piece of exceedingly close-textured meat requiring much cooking to make it tender and eatable. As it is nutritious and, in this day of high prices, not expensive, it is worth careful cooking. It must be first washed thoroughly, running a knife well down into the cavities and cutting through the adjacent walls that all blood clots may be removed. Trim off the tough 'ear' at the top and dry on a cloth. Make a savory stuffing with equal parts of sausage meat and fine stale bread crumbs, adding a large spoonful or more of finely chopped parsley. Fill the cavity with this; if any remains, roll it in small balls and place in a shallow greased pan. Fasten the top with a couple of stitches; then brown the entire outside of the heart in a spoonful or two of hot fat in a frying pan. Transfer to a deep earthen casserole or baking dish having a tightly fitting cover, laying it in point downward. Pour round it a scant pint of either a thin tomato or savory brown sauce; lacking either, use soup stock or plain boiling water—these variations giving different results in the flavor of the finished dish. Cover closely and place in a moderate oven for four hours. When an earthen dish is used the evaporation will be less than with an agate or metal one, the latter usually necessitating the addition of more sauce during the cooking. It is well to have an extra amount of the sauce, that there may be sufficient to fill the gravy boat. With this meat a dish of spiced or pickled peaches, or a tart jelly, will harmonize admirably.

The vegetable pudding will need a pint of canned corn, which should be passed through the food chopper. Mix with this one well beaten egg, a half-cupful of milk, a high seasoning of salt and pepper, and two tablespoonfuls of melted butter. Turn this into a deep greased dish and bake in a moderate oven until firm in the center; this will take from thirty-five to forty-five minutes, according to its thickness.

One quart of potatoes should be ample for six persons. Pare and boil them as usual. When done drain off the water, sprinkle with salt, cover with a cloth and draw to the side of the fire, where they will steam and dry for five minutes; then with a potato ricer—or, using a colander or coarse strainer and a spoon or wooden masher—press them through and let fall into a hot vegetable dish like grains of rice or flakes of snow. Do not press or disturb their lightness, and send them to the table as quickly as possible.

As a dressing for the salad beat two eggs in a saucepan. Add to them six tablespoonfuls of warm water and three of vinegar, mixing smoothly with the latter a pinch of dry mustard, a half-teaspoonful of salt and a third of a teaspoonful of white pepper. A little sugar may also be added if a sweetened dressing is desired. Stir this over the fire in a double boiler until the mixture is very thick; add a heaping tablespoonful of butter cut in bits, and stir until it is absorbed. Pass this through a sieve and set away to chill. Mix equal proportions of diced tart apple and cut blanched celery, and add half of the dressing. Stir two tablespoonfuls of stiffly whipped cream or the well beaten white of an egg into the remainder of the dressing and pour it over the salad in the dish. The cheese wafers are bought in cartons or packages.

For the chocolate custards scald a pint and a half of milk in a double boiler. Separate the whites and yolks of four eggs, and beat the latter with two-thirds of a cupful of sugar. Melt one square and a half of grated chocolate over hot water, smoothly mix it with a little of the milk. Add this to the yolk mixture and stir in the bulk of the hot milk. Return all to the double boiler and stir until it is smoothly thickened. Add one teaspoonful of vanilla and divide it between six custard cups. Whip the whites of the eggs to a stiff meringue with four tablespoonfuls of sifted powdered sugar and heap over the custards just before dinner is announced. The coffee should be made in a drip pot, allowing one scant tablespoonful of very finely powdered coffee for each person.

Notice of Assessment No. 15.

THE SILVER SHIELD MINING AND Milling company, principal place of business Salt Lake City, Utah. Notice is hereby given that at a meeting of the board of directors of the above named company, held on the 14th day of October, 1905, assessment No. 15, of 3 cents per share, was levied on the capital stock of the corporation outstanding, payable immediately to E. H. Mead, secretary, at 514 McCornick building, Salt Lake City, Utah. Any stock upon which this assessment may remain unpaid on Tuesday, Nov. 14, 1905, will be delinquent and advertised for sale at public auction, and unless payment is made before will be sold on Thursday, Nov. 30, 1905, at 10 a. m., at the office of the assistant secretary, 514 McCornick building, Salt Lake City, Utah, to pay the delinquent assessment, together with cost of advertising and expense of sale.
E. H. MEAD, Secretary.
514 McCornick Building, Salt Lake City, Utah.